

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION II

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IN THE MATTER OF:

The City of New York,

Respondent.

Docket No. RCRA-O2-2000-7303

Proceeding Under Section 7003 of the
Solid Waste Disposal Act, as amended.

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ADMINISTRATIVE ORDER ON CONSENT

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I. JURISDICTION

1. This Administrative Order On Consent ("Order") is issued to City of New York (the "City" or "Respondent"), by the United States Environmental Protection Agency ("EPA"), Region 2 (the "Region") pursuant to the authority vested in the Administrator of EPA by § 7003 of the Resource Conservation and Recovery Act as amended by the Hazardous and Solid Waste Amendments of 1984, 42 U.S.C. § 6901 et seq. (the "Act"), which authority has been duly delegated to the Regional Administrator of the Region. Notice of this Order has been provided to the State of New York Department of Environmental Conservation as required by Section 7003(a) of the Act, 42 U.S.C. § 6973(a).

2. To effectuate the mutual objectives of the Region and the Respondent, the Respondent agrees to undertake all actions required by the terms and conditions of this Order, and consents to and will not contest the Region's jurisdiction to issue and, if necessary, enforce this Order and will not contest the terms of this Order. As stated more fully in Section XXVIII. below, Respondent does not admit or deny any finding of fact or conclusion of law in this Order.

II. PARTIES BOUND

1. This Order, and the responsibilities and obligations it imposes, shall apply to and bind the Region and Respondent and, in their official capacity, Respondent's officers, officials, employees, agents, trustees, receivers, successors and assigns.

2. All contracts to be entered into by Respondent designed to satisfy its responsibilities or obligations under this Order shall comply strictly with the terms and conditions of this Order. Respondent shall take appropriate steps to assure that work being performed under current contracts, which work is necessary to Respondent's performance of this Order, complies strictly with the terms and conditions of this Order.

3. Regardless of Respondent's employ of, or contractual agreement with, any entity named in subsections 1 or 2 of this Section, Respondent remains ultimately liable for failure to carry out, or comply with, any term or condition imposed by this Order.

4. Within one week of its receipt of this Order, and upon hiring, Respondent shall provide a copy of this Order to all of Respondent's project management personnel and prime contractors, retained to conduct, monitor, or perform any work pursuant to this Order.

5. Respondent shall give notice, and a copy, of this Order to any successor in interest prior to any transfer of ownership or operation of Shafts 9, 10, 17 or 18 (as defined in Section III below) or any other component of the New York City Water Supply System which is the subject of this Order, and shall notify the Region's Project Coordinator thirty (30) days prior to any such transfer. (Unless otherwise noted, throughout this Order "days" shall refer to calendar days. Where a due date falls on a weekend or federal holiday, the due date shall be the first subsequent business day.)

III. FINDINGS OF FACT AND CONCLUSIONS OF LAW

1. Respondent is a person as defined by Section 1004(15) of the Act, 42 U.S.C. § 6903(15).
2. The City consumes approximately 1.2 billion gallons of drinking water per day. Almost all of this water, plus a major portion of the drinking water consumed by Westchester County, is provided by the New York City Water Supply System, owned by the City and operated by the New York City Department of Environmental Protection (“NYCDEP”).
3. The City’s water comes from three component systems of 19 reservoirs and 3 controlled lakes in Westchester, Putnam, Ulster, Greene, Schoharie, Delaware and Sullivan Counties in upstate New York: under normal conditions, the Delaware System supplies 50% of the total water used, the Catskill System supplies 40% of the total water used, and the Croton System supplies the remaining 10%. In the Delaware System, water flows to the City from the upstate watershed through the Delaware Aqueduct.
4. On the east side of the Hudson River, the flow of water through the Delaware Aqueduct, and the two reservoirs located on this Aqueduct, is controlled by sluice gates which are raised and lowered by devices known as sluice gate operators (the “Operators”). The Operators are connected to the sluice gates by long shafts which pass through vertical, concrete chambers, known as sluice gate wells, or gate wells. The Operators sit directly above the gate wells. The sluice gates are raised up in the gate wells when they are opened and lowered to the base of the gate wells when they are closed.
5. The Operators are located in four buildings known as Shafts 9, 10, 17 and 18 (sometimes referred to collectively as the “relevant Shafts”). Within the relevant Shafts, water from the Delaware Aqueduct and/or the reservoirs separates into several channels, each of which directs water through the base of a sluice gate well. The flow of water in any given channel may be regulated by opening or closing the sluice gate.
6. The relevant Shafts, whose Operators are the primary subjects of this Order, are located north of the City’s boundaries (“upstate”) as follows: Shaft 9 – on the West Branch Reservoir (inflow) in the town of Carmel, N.Y.; Shaft 10 – on the West Branch Reservoir (outflow) in the town of Carmel, N.Y.; Shaft 17 – on the Kensico Reservoir (inflow) in the town of North Castle, N.Y.; and Shaft 18 – on the Kensico Reservoir (outflow) in the town of Mt. Pleasant, N.Y.
7. Shafts 10 and 18 are regularly staffed by NYCDEP employees. No NYCDEP employees are based at Shafts 9 or 17, but NYCDEP employees are periodically present at Shafts 9 and 17.
8. In November 1998, there were a total of 45 Operators in the relevant Shafts, as follows: Shaft 9 – 6 Operators; Shaft 10 – 7 Operators; Shaft 17 – 8 Operators; and Shaft 18 – 24 Operators.

9. The Operators in the relevant Shafts were installed in or about the 1940s. Originally, each Operator contained oil and contained mercury as a sealant to prevent lubricating oil in the thrust bearing housing from leaking. On information and belief, some of the oil in the Operators contained polychlorinated biphenyls ("PCBs"). Because the Operators sit directly above the sluice gate wells through which water flows, it is possible that mercury or PCB oil that leaks from inside an Operator could enter the City's drinking water supply.

10. In addition, sub floor chambers at Shaft 10 contain devices, known as actuators, that control increment or rectangular gate valves which regulate the outflow of water from Shaft 10 into the Delaware Aqueduct. There are currently 12 actuators at Shaft 10. The actuators also contain mercury and, on information and belief, may have contained PCB oil. Also located in the sub floor chambers of Shaft 10 are devices known as manometers, which currently or in the past were used to measure the volume of water flowing out of Shaft 10. These manometers are also known to contain mercury and are found in other upstate source facilities in the City's water supply system.

11. Elemental mercury is a hazardous waste under the Act and its implementing regulations if it meets the toxicity characteristic of 0.2 mg/l under the Toxicity Characteristic Leaching Procedure. 40 C.F.R. § 261.24. At lower concentrations, mercury that is discarded, spilled, leaked, or otherwise disposed is solid waste within the meaning of the Act, 42 U.S.C. § 6903(27).

12. Lead is a hazardous waste under the Act and its implementing regulations if it meets the toxicity characteristic of 5.0 mg/l under the Toxicity Characteristic Leaching Procedure. 40 C.F.R. § 261.24. At lower concentrations, lead that is discarded, spilled, leaked, or otherwise disposed is solid waste within the meaning of the Act, 42 U.S.C. § 6903(27).

13. PCBs are hazardous constituents listed in Appendix VIII to 40 C.F.R. § 261, but generally are not regulated under the Act. Rather, PCBs are regulated primarily as a toxic chemical under the Toxic Substances Control Act, 15 U.S.C. §§ 2601 et seq. ("TSCA"). Discarded, spilled, leaked or otherwise disposed PCBs, however, are solid wastes within the meaning of the Act, 42 U.S.C. § 6903(27). PCBs in excess of 50 parts per million are regulated by the State of New York as a hazardous waste. 6 New York Codes, Rules and Regulations § 371.4(e).

14. In or about November 1998, Roy F. Weston, Inc. ("Weston") began removing Operators at Shaft 18 pursuant to a contract with the City, known as DEL-57. Under DEL-57 and its amendments, Weston is to remove the Operators from Shaft 18; dismantle, decontaminate and dispose of the Operators; remove and decontaminate and/or dispose of the base support structures under each Operator; and remove manometers and other mercury containing devices. Under DEL-57, Weston's decontamination work includes decontamination of mercury, PCBs and lead. Weston will also prepare a health risk assessment for Shaft 18 and if necessary, may remediate Shaft 18 and the gate well walls beneath the Operators. Pursuant to a second contract, DEL-25, the City will replace the Operators and

gates in Shaft 18. The City has also initiated procurement for DEL-157, a contract to remove manometers and other mercury containing devices located in facilities in the upstate portion of the City's water supply system, excluding Shaft 18.

15. As of the date of this Order, Weston has removed, dismantled and decontaminated 15 of the 24 Operators from Shaft 18.

16. Respondent has recently taken steps to minimize the potential for mercury, lead or oil to enter the water supply from the relevant Shafts and implemented plans to protect the health and safety of employees who work in or enter the relevant shafts. Respondent has submitted a health and safety plan for each of the relevant Shafts to the New York State Department of Health ("NYSDOH") for review and comment. Respondent has modified the discharge pipes from sumps in Shaft 10 to prevent any discharge of contaminated waters into the West Branch Reservoir. Respondent has formed a Special Technical Working Group, consisting of representatives of the Region, NYCDEP, NYSDOH, and the New York State Department of Environmental Conservation ("NYSDEC"), to assist it in determining whether additional measures are available to further these goals.

17. As of the date of this Order, the City has not yet entered into any contracts for the removal and replacement of the Operators in Shafts 9, 10 and 17. The City has commenced procurement of a contract for design of the rehabilitation of Shafts 9, 10, and 17, including removal and replacement of the Operators. As of the date of this Order, the City has commenced procurement of, but has not yet entered into, a contract for the removal and replacement of the actuators at Shaft 10.

18. In or about December 1998, the Region initiated an investigation, including on-site inspections of the relevant Shafts. On December 10, 1998, Regional personnel inspected Shaft 18. Thereafter, on June 30, July 1, July 8, and July 9, 1999, all four relevant Shafts were inspected by Regional personnel and/or their consultants. Regional personnel and/or their consultants collected samples on each of those four days. On February 8, 2000, Regional personnel inspected the South Increment Chamber and Rectangular Chamber, portions of the sub floor area at Shaft 10. In addition, in or about July 1999, Shafts 9, 10, 17, and 18 were inspected by EPA's National Enforcement Investigation Center ("NEIC").

19. Pursuant to the above inspections, the Region and/or NEIC found mercury in concentrations exceeding the regulatory limit of 40 C.F.R. § 261.24 in the interior of Operators outside the mercury seal in most of the Operators sampled at Shafts 10, 17 and 18. Lead, in concentrations exceeding the regulatory limit of 40 C.F.R. § 261.24, was found in the interior of Operators, within the torque tube tub of a Shaft 18 Operator, and on base assemblies inside most of the Operators sampled at Shafts 10 and 18. Mercury was found at Shaft 18 in the gate wells below Operators, in six gate wells sampled, and lead was found in one of the six gatewells sampled. Mercury was also found at Shaft 18 on the floor below the hatch base assembly of one Operator sampled. Mercury, in concentrations exceeding the regulatory limit of 40 C.F.R. § 261.24, was found at Shaft 10 in the interior of some of the

actuators, outside its original containment area, and beaded in small amounts on the floor and on pipes of the sub floor area.

20. Pursuant to the above inspections, the Region and/or NEIC found PCBs in the interior of Operators outside of oil reservoirs in most of the Operators sampled at Shaft 18 and one Operator sampled at Shaft 10. PCBs were also found at Shaft 18 on the outside wall of one Operator, on the floor below the hatch base assembly of a second Operator, and below some Operators, in the gate wells.

21. Pursuant to an inspection conducted by Respondent on July 22, 1999, mercury and lead exceeding the regulatory limit of 40 C.F.R. § 261.24 were found in sludge located in the interior bases of the three Operators sampled at Shaft 18.

22. Pursuant to an inspection conducted by Respondent of Shafts 9 and 17, on or about February 16 and 17, 2000, mercury exceeding the regulatory limit of 40 C.F.R. § 261.24, was found beaded in small amounts on the floor outside Operator 4 in Shaft 9, and throughout the floor of the Operator room in Shaft 17. (Respondent has cleaned up the mercury found during these inspections).

23. With reference to PCBs, mercury and lead, monitoring of the City's drinking water supply shows that the City's drinking water has been, and continues to be, safe and that the water has met, and continues to meet, State and federal drinking water requirements for PCBs, mercury and lead.

IV. DETERMINATION

Based on the foregoing FINDINGS OF FACT AND CONCLUSION OF LAW and the entire administrative record, the Regional Administrator of the Region, upon receipt of evidence and information that the disposal and handling of solid and hazardous waste at Shafts 9, 10, 17, and 18 may present an imminent and substantial endangerment to human health or the environment since the above conditions at the relevant Shafts present the potential for a future risk to health or the environment, has determined that the issuance of this order is necessary to protect human health and the environment.

V. ORDER

Pursuant to the authority of § 7003 of the Act, 42 U.S.C. § 6973, IT IS HEREBY ORDERED THAT:

1. Unless otherwise specified, Respondent shall perform investigatory and remedial actions, and any other task required by this Order, at Shafts 9, 10, 17 and 18 of the New York City Water Supply System only in accordance with Section VI of this Order, WORK REQUIREMENTS, APPROVALS AND SCHEDULE. As used herein, the term "receipt" shall mean the receipt of a fully executed copy of this Order.

2. Respondent shall fully cooperate with EPA and Regional representatives in carrying out the provisions of this Order.
3. Effective immediately upon receipt of this Order, disposal of any hazardous wastes or wastes containing PCBs generated as a result of the work required by this Order shall be in compliance with applicable provisions of the Act and/or TSCA, and other applicable law and regulation.
4. Respondent shall maintain warning signs which have been posted at the entrances to the relevant Shafts. A copy of a representative sign is attached as Appendix A. Respondent may, with prior approval by the Region, post other signs and/or substitute signs containing different language if Respondent determines, and the Region agrees, that other signs or wording are more appropriate.
5. To the extent not already performed by Respondent, within forty-eight (48) hours of receipt of this Order, Respondent shall implement a plan to prevent the unknowing entry, and minimize the possibility for the unauthorized entry, of persons into Shafts 9, 10, 17 and 18. Respondent shall submit a copy of the plan to the Region within ten (10) days of receipt of this Order.
6. Respondent shall continue to implement the existing health and safety plan for employees working in each of the relevant Shafts, which plans were previously submitted to NYSDOH for review and comment. To the extent not already prepared by Respondent, Respondent shall prepare for each relevant Shaft an air monitoring plan for worker safety, and a contingency plan for accidental spills of PCBs, lead or mercury, or air releases of mercury, including provisions for evacuation from the relevant Shafts. A copy of each health and safety plan shall be submitted to the Region within sixty (60) days of submission of NYSDOH's final comments. A copy of the air monitoring plan and the contingency plan for each of the relevant Shafts must be submitted to the Region for approval within fifteen (15) days of receipt of this Order.
7. To the extent not already performed by Respondent, within ten (10) days of receipt of this Order, Respondent shall implement a plan for providing employees or their lawful representatives updates on progress of the work to be performed under this Order, the results of all air monitoring required by each plan prepared pursuant to subsection 6, and notice of other potential contamination concerns, should they occur. A copy of this plan must be submitted to the Region within fifteen (15) days of receipt of this Order.
8. To the extent not already performed by Respondent, within ten (10) days of receipt of this Order Respondent shall implement a plan for regular visual inspections of the exterior bases and all adjacent floor surfaces of the Operators in Shafts 9, 10, 17 and 18, including mercury vapor readings at the edges of the adjacent floor slabs/grates, and for cleanups, where necessary. These visual inspections shall be performed not less than once monthly, and the mercury vapor readings shall be performed not less than once quarterly. If these inspections reveal visible mercury or oil, Respondent shall assure that the exterior bases and adjacent floor surfaces outside the Operators are appropriately cleaned in accordance with

the plan. A copy of this plan must be submitted to the Region within fifteen (15) days of receipt of this Order, and Respondent shall include all information regarding the implementation of this activity in its quarterly reporting to the Region, as described below. Respondent will reevaluate the schedule of inspections after the first six months based upon the results of the monthly inspections, and may modify the schedule with the approval of the Region.

9. Respondent shall continue routine monitoring of the water supply for mercury, PCBs and lead that includes weekly monitoring for mercury and monthly monitoring for PCBs and lead. All monitoring shall be performed at the sampling point within Shaft 19. All samples must be analyzed by a certified laboratory approved by NYSDOH in accordance with approved State and federal methods for analysis of drinking water. This monitoring shall be in addition to the monitoring requirements of the Safe Drinking Water Act, 42 U.S.C. §§ 300f et seq., and the State Sanitary Code. Respondent shall include all information regarding the implementation of this activity in its quarterly reporting to the Region, as described below. In addition, in the event Respondent detects mercury, PCBs, or lead in an amount greater than 50% of the applicable Maximum Contaminant Level under the Safe Drinking Water Act, as a result of the monitoring required above, Respondent shall notify the Region and the NYSDOH as soon as possible after Respondent receives the monitoring results with the detection, but in no case later than the close of the next business day. Notwithstanding any action taken by Respondent in response to a detection to notify the public and to protect public health, the Region may notify the Respondent if any additional actions are necessary.

10. Respondent shall continue to implement the system-wide Standard Operating Procedure (“SOP”) for the normal operation of all Operators in the relevant Shafts attached as Appendix B. Respondent shall include all information regarding the implementation of this activity in its quarterly reporting to the Region, as described below. Respondent may modify the SOP without prior approval of the Region if Respondent determines that modification is necessary for water supply operations and shall submit a copy of the modified SOP to the Region within fifteen (15) days of any such modification. Respondent may modify the SOP for any other reason only with prior approval by the Region.

11. a) Respondent shall, in conjunction with the Special Technical Working Group, consisting of representatives of NYCDEP, the Region, NYSDOH and NYSDEC, continue to evaluate the feasibility of developing a sound engineering method for minimizing the potential that leaks within the Operators in the relevant Shafts could spill through and around the torque tubes inside the Operators and into the water supply below. This evaluation may include pilot testing of an engineering method to determine the effectiveness of the method in minimizing the potential for such leaks where such pilot testing is agreed to by the Special Technical Working Group.

b) If the Respondent, in conjunction with the Special Technical Working Group, identifies a feasible, sound engineering method for minimizing the potential that leaks within the Operators could spill through and around the torque tubes, it shall submit to the Region within forty-five (45) days after the method is agreed to by the Special Technical Working Group an implementation plan that will assure that all

existing Operators in the relevant Shafts are modified accordingly. This implementation plan shall include completion dates of major tasks necessary to modify each Operator.

c) If the Region approves the implementation plan, the Respondent shall implement the plan accordingly. Respondent shall include all information regarding the implementation of this activity in its quarterly reporting to the Region, as described below.

12. No later than July 31, 2000, Respondent shall enter into a contract and issue a Notice to Proceed for work to complete the “New York City Department of Environmental Protection Intermediate Mercury and Sludge Remediation Protocol for Sluice Gate Operators – Delaware Aqueduct Shafts 9, 10, 17, and 18 (attached as Appendix C). Respondent or its contractor shall complete all initial remediation provided for in Appendix C by September 30, 2000, including installation of rubber plugs into the four holes of each Operator and shall re-inspect each Operator and perform remediation activities as needed on a quarterly basis until June 30, 2001. By June 30, 2001, based on the findings of the initial remediation and follow-up inspections, Respondent, with approval from the Region, will determine the future frequency at which follow-up inspections are necessary. Based on the data available, Respondent may increase or decrease the inspections from a quarterly basis. In no case, however, can the Respondent reduce this frequency to less than annually, until every current Operator is removed from the relevant Shafts. Respondent shall include all information regarding the implementation of this activity in its quarterly reporting to the Region, as described below.

13. a) Respondent shall continue to operate the sumps in Shaft 10 so as to prevent any discharge of contaminated wastes into the West Branch Reservoir.

b) No later than May 31, 2000, Respondent shall initially remove all water from the base of the stuffing box in each actuator in the sub floor chambers to Shaft 10.

c) To the extent not already performed by Respondent, during June and July, 2000, each time before and after Respondent operates an actuator, Respondent shall visually inspect the exterior of the actuator in the sub floor chambers of Shaft 10 and the water level in the stuffing box in the actuator, unless readings taken in the sub floor chambers of Shaft 10 prior to such inspection indicate mercury vapor levels at or exceeding .025 mg/cubic meter. If the mercury vapor levels are .025 mg/cubic meter, or greater, then Respondent shall have properly trained and equipped staff perform the inspection of the relevant actuator(s) and the stuffing box water levels in the actuator(s) within 48 hours of operation of the actuator(s). Respondent shall visually inspect each actuator not inspected as a result of operating the actuator on a monthly basis. As soon as practicable after an inspection, but in no case later than seventy-two (72) hours following the inspection, Respondent shall remove the water from the base of the stuffing box in an actuator when, based on the inspection, the stuffing box appears more than 3/4 full of water. Respondent may seek written approval from the Region for extension of the seventy-two (72) hour period. After the conclusion of the above two month period, the Special Technical Working Group

shall determine a schedule for inspecting and removing water from the actuators, based on the results of the inspections, and submit said schedule to the Region by September 15, 2000.

d) No later than May 31, 2000, Respondent shall remediate all accessible surfaces in the sub floor chambers of Shaft 10 of all visible mercury and oil and grease. Respondent shall subsequently inspect all surfaces on a monthly basis and clean all surfaces as necessary.

e) Respondent shall properly manage and dispose of all discharges from the sumps, water removed from the base of the stuffing box in each valve actuator, and wastes generated from cleaning accessible surfaces in the sub floor chambers of Shaft 10, in conformance to the requirements of the Act and other applicable law and regulation. This shall include, but is not limited to, performing hazardous waste determinations in accordance with 6 NYCRR 372.2(a)(2).

14. a) Respondent shall continue to remove and replace all of the Operators in Shaft 18, in accordance with DEL-57 and DEL-25, and in accordance with the schedule set forth below:

- 1) Construction Phase One
 - i. Commence contractor mobilization by 9/15/00 to remove and decontaminate Operators 16,18 and 25.
 - ii. Complete removal and decontamination of Operators 16,18 and 25 by 5/14/01.
 - iii. Install new Operators/gates 16, 18, 19 and 25 by 5/30/01.
- 2) Construction Phase Two
 - i. Commence contractor mobilization by 9/15/01 to remove and decontaminate Operators 17, 20, 21, and 24.
 - ii. Complete removal and decontamination of Operators 17, 20, 21, and 24, by 5/6/02.
 - iii. Install new Operators/gates 17, 20, 21 and 24 by 5/30/02.
- 3) Construction Phase Three
 - i. Commence contractor mobilization by 9/15/02 to remove and decontaminate Operators 22, and 23.
 - ii. Complete removal and decontamination of Operators 22, and 23, by 3/30/03.
 - iii. Install new Operators/gates 22, and 23 by 5/30/03.

Pursuant to notice to the Region, accompanied by an explanation, the Respondent may substitute Operators between construction phases as long as the total number of Operators removed and replaced in each of the above three construction phases remains constant.

b) No later than July 31, 2000, Respondent shall submit for the Region's approval a schedule which shall identify performance dates for commencing and completing a risk assessment at Shaft 18. Upon completion of the risk assessment, Respondent shall submit a copy to the Region. Along with the risk

assessment, Respondent shall also submit to the Region for approval a proposed remediation plan and schedule for Shaft 18. Respondent shall implement the remediation plan as approved by the Region and include all information regarding the implementation of the risk assessment schedule and the remediation plan in its quarterly reporting to the Region, as described below.

15. a) No later than June 30, 2000, Respondent shall submit for the Region's approval a schedule for the completion and commencement of the removal and replacement of the actuators controlling the rectangular and increment gate valves in the sub floor chambers of Shaft 10.

b) Respondent shall remove and replace all of the Operators in Shaft 9, 10, and 17 and remediate said Shafts, in accordance with the schedule set forth below. To the extent feasible said work shall proceed simultaneously in all three Shafts, rather than sequentially on a Shaft-by-Shaft basis.

1. Issue a request for proposals for a design contract by 4/15/00.
2. Make recommendation for award of design consultant by 11/30/00.
3. Issue Notice to Proceed to selected design consultant by 3/31/01.
4. Submit preliminary design to the Region by 3/31/02.
5. Submit final design to the Region, including a complete risk assessment and a proposed remediation plan within ninety (90) days of the Region's approval of the preliminary design, or by 7/31/02, whichever is later.
6. Within thirty (30) days of the Region's approval of the final design, or by 9/30/02, whichever is later, submit to the Region schedules for the removal and replacement of all Operators in Shafts 9, 10, and 17, and for the remediation of each Shaft.
7. Within one hundred and twenty (120) days of the Region's approval of the schedules submitted pursuant to subsection 6 immediately above, or by 3/1/03, whichever is later, issue a Notice to Commence for the construction contract for removal and replacement of all Operators in Shaft 9, 10, and 17, and the remediation of each Shaft.

c) Respondent shall include all information regarding the implementation of the plans and schedules required by subsections 15a and 15b above, as approved by the Region, in its quarterly reporting to the Region, as described below.

16. a) No later than July 31, 2000, Respondent shall submit a construction schedule as per DEL-157 for the commencement and completion of the removal of manometers or other devices containing mercury listed in DEL-157.

b) No later than November 30, 2000, Respondent shall submit a complete evaluation of all upstate source facilities in the City's water supply system which contain manometers or other devices containing mercury, excluding thermostats, lights and switches. This evaluation shall include: the number and location of these devices; a characterization of the intended use of each facility and its level of

occupancy; the approximate design capacity for the mercury containing devices; a description of observable mercury, if any, found in each facility based on both an intensive visual inspection and mercury vapor readings; a characterization of potential pathways to the environment, including but not limited to sumps or floor drains; and a description of measures the City has taken to reduce any potential of contamination. Based on its review of the City's evaluation, the Region will determine what if any action needs to be taken to supplement the City's activities.

17. Until complete remediation of all the relevant Shafts has been completed, Respondent shall provide the Region with written quarterly reports on the activities described above for which a report is required by this Order within thirty (30) days of the end of each calendar quarter. (April 30, July 30, October 30 and January 30).

VI. WORK REQUIREMENTS, APPROVALS AND SCHEDULE

1. Any activities conducted under the terms of this Order including, but not limited to, the disposal or storage of wastes, the preparation and implementation of a contingency plan, or the preparation and implementation of plans for personnel training, preparedness and prevention, or emergency procedures shall comply with the applicable provisions of the Act and/or TSCA, and applicable federal or State regulations either promulgated or authorized under the Act.
2. Unless otherwise specified, the Region will endeavor to review any plan, report, specification or schedule submitted pursuant to, or required by this Order, and provide its written approval, disapproval, comments and/or modifications to the Respondent within thirty (30) days of receipt. Unless otherwise specified by the Region where the Region's comments may require additional time for response, the Respondent shall submit a revised document within thirty (30) days of its receipt of the Region's written comments and/or modifications. Any such revised document submitted by the Respondent shall incorporate the Region's comments and/or modifications. The Region will then approve the revised document or modify the revised document and approve it with any such modifications. Alternatively, in its discretion, the Region may require the Respondent to further revise the document and resubmit it to the Region for approval or approval with modifications. The revised document, as approved by the Region, shall become final. All final approvals shall be given to the Respondent in writing.
3. The Respondent shall commence work approved by the Region in the Region's final written approval within the time frame provided in said approval, and shall thereafter comply with each approved performance date ("milestone"). Any noncompliance with such plan, report, specification, or schedule approved by the Region shall be considered a violation of this Order.
4. Any reports, plans, specifications, or schedules, submitted pursuant to, or required by this Order, are hereby incorporated by reference into this Order effective ten (10) days following the date written approval of such document is given by the Region. Prior to this written approval, no plan, report,

specification or schedule in a document submitted to the Region shall be construed as finally approved. Verbal advice, suggestions, or comments given by the Region's representatives will not constitute an official approval, nor shall any verbal advice, suggestions or comments be considered binding. All Appendices attached to this Order shall be deemed to be part of this Order.

VII. QUALITY ASSURANCE/QUALITY CONTROL

1. All sampling, monitoring, analytical, and chain-of-custody plans shall be developed in accordance with the standards and recommended procedures contained in SW-846 - "Test Methods for the Chemical and Physical Analysis of Solid Waste", third edition, as amended, or the "New York State Department of Health Environmental Laboratory Approval Program Certification Manual", or the Region's "Quality Assurance Manual", as applicable. Any deviations from the applicable document must be accompanied by an appropriate justification and a demonstration of the effectiveness and applicability of the proposed alternative. The Region must approve the use of any such alternatives prior to their implementation.
2. Respondent shall inform the Region's Project Coordinator in advance which laboratories will be used by Respondent and ensure that the Region's representatives have access to the laboratories and personnel performing all analyses. If, for any reason, the Region or its representatives cannot satisfactorily obtain access to the laboratories for the purposes of auditing protocols and technical proficiency, then the Region shall so inform the Respondent and the Respondent shall, within five (5) days thereafter, provide for such access or substitute another certified laboratory which provides access in a manner deemed satisfactory to the Region.
3. Respondent shall consult with the Region in planning for field sampling and laboratory analysis, including a description of the chain of custody procedures to be followed.

VIII. QUALIFICATIONS OF PERSONNEL AND AGENTS

All work performed by Respondent pursuant to this Order shall be under the direction and supervision of an individual(s) who has demonstrated expertise in site investigations and remediation. Before any work is performed, Respondent shall notify the Region in writing of the name, title, and qualifications of the supervisory personnel and contractors or subcontractors and their personnel to be used in carrying out the terms of this Order. In addition, Respondent shall ensure that when a necessary license is required, only licensed individuals shall be used to perform any work required by this Order.

IX. LIABILITY INSURANCE

Respondent shall take all necessary steps to assure that its contractors maintain adequate insurance coverage or indemnification for the duration of the work required pursuant to this Order.

X. RETENTION OF RECORDS

1. Respondent shall preserve or make arrangements for the preservation of, during the pendency of this Order and for a minimum of three (3) years after its termination, as specified in Section XXVII of this Order, all data, records and documents listed below in its possession or in the possession of its officers, officials, employees, agents, consultants, contractors which relate in any way to Respondent's performance of this Order, or to the past and/or current waste management practices at the relevant Shafts.

a. Reports of any incident involving the discharge, deposit, dumping, leaking or spilling of a hazardous waste or a hazardous constituent at a relevant Shaft, and any remedial action taken by Respondent in response thereto.

b. Reports of all incidents requiring implementation of a Shaft's contingency plan.

c. Reports of inspections and inspection results.

d. All other final reports, studies, plans, notices, risk assessments, schedules and standard operating procedures.

e. Waste analyses and determinations.

f. All other test, sampling, monitoring, laboratory and analytical results or data.

g. Records pertaining to hazardous waste and hazardous constituents generated and/or stored at the relevant Shafts.

h. Records pertaining to hazardous waste and hazardous constituents disposed of by the relevant Shafts including, but not limited to, manifests of off-site shipments.

i. Any other data, or final record or document, generated as a consequence of Respondent's performance of the work required by this Order, or pursuant to past and/or current waste management practices at the relevant Shafts.

The Respondent shall make such records available to the Region, NYSDOH and the NYSDEC and/or shall provide copies of any documents that the Region, NYSDOH, or NYSDEC request. Written notification shall be provided to the Region, ninety (90) days prior to the destruction of any or all such documents. Such written notification shall reference the date, caption, and docket number of this Order and shall be addressed to the Regional Administrator of the Region, with copies sent to the individual listed in Section XII. 1 of this Order.

2. All data, records and documents required to be preserved by subsection one immediately above, in the possession of Respondent, its officers, officials, or employees shall be stored at the locations listed in Appendix D. With reference to all data, records and documents required to be preserved by subsection one immediately above, in the possession of Respondent's agents, consultants or contractors, Respondent shall prepare and maintain a list of such agents, consultants and contractors by name and address, and provide the Region with a copy of this list within sixty (60) days of its receipt of this Order. Respondent shall update this list to keep it current, and shall provide the Region with an updated copy within five (5) business days of receipt of a written request by the Region.

XI. PROJECT COORDINATORS

1. Douglas G. McKenna of the Region's Division of Enforcement and Compliance Assistance is hereby designated as the Region's Project Coordinator (the "PC"), and Carl Pellegrino of the Region's Emergency and Remedial Response Division is hereby designated as the Region's alternate PC who may function in the absence of the designated PC. The PC shall be responsible for overseeing the implementation of this Order. The PC, or his or her designee, will be the Region's designated representative at all the relevant Shafts. The Region will have the right to change the PC and alternate PC, and will inform the City in writing should such change occur.

2. All communications between Respondent and the Region, and all documents, notices, reports, schedules, plans, evaluations, SOPs, approvals, and other correspondence concerning the activities performed pursuant to the terms and conditions of this Order, shall be directed to and through the PC and the City's representative designated pursuant to section XII. immediately below.

XII. NOTICES AND REPORTS

1. For purposes of this Order, all written communications, notices or submissions required by this Order shall be directed to a person specified by each party. The Region has designated the PC as the recipient, as follows:

Mr. Douglas G. McKenna
Public Water Supply Enforcement Team
U.S. Environmental Protection Agency
290 Broadway
New York, New York 10007-1866
Tel: (212) 637-4244
Fax: (212) 637-3953

2. Respondent shall designate in writing one or more persons to receive such written communications, notices or response to submissions required by this Order and shall provide a mailing address, telephone

number and fax number for such persons. Respondent shall notify the Region in writing of any changes concerning its designee(s).

3. The Region shall provide at least five (5) days written notice prior to changing the PC and shall immediately provide written notification once a new PC is selected.

4. In addition to reporting to the Region, Respondent shall send copies of all information provided to the Region to the NYSDOH. The latter has initially designated the following person as recipient:

Mr. James Covey
NYC Watershed Unit
Bureau of Public Water Supply Protection
New York State Department of Health
Flanigan Square
457 River Street
Room 400, 4th floor
Troy, New York 12180-2216
Tel: (518) 402-7650
Fax: (518) 402-7659

XIII. EMERGENCY PROVISIONS

1. In the event the Respondent identifies a current or imminent threat to human health or the environment related to the relevant Shafts, the Respondent shall immediately notify the Region orally and notify the Region in writing within twenty four (24) hours summarizing the nature, immediacy, and magnitude of the actual or potential threats to human health or the environment. The Respondent shall, as soon as possible, submit to the Region for its approval, a plan to mitigate such threat. The Region will approve or modify this plan, and the Respondent shall implement this plan as approved or modified by the Region. If the Region determines that more expedient action is required, then the Region's Director of the Division of Enforcement and Compliance Assistance (the "Director") may orally authorize Respondent to act prior to Respondent's making any written submission to the Region. In the case of an extreme emergency, Respondent may act without prior approval by the Region. Any such unapproved action shall be taken at Respondent's own risk, and Respondent shall be responsible for any different or additional action subsequently required by the Region to mitigate the threat(s), and for any penalties incurred based on such actions which do not comply with any requirement of this Order, or other legal requirements.

2. If the Region determines that activities in compliance with this Order have caused or may cause a release of a hazardous waste, or a hazardous constituent, or may pose a threat to human health or the environment, the Region may direct Respondent to stop further implementation of this Order, or a

portion of this Order, for such period of time as may be needed to abate any such release or threat and/or undertake any action which the Region determines to be necessary.

XIV. AVAILABILITY OF INFORMATION/NOTIFICATION

1. All data, information, and records maintained by the Respondent pursuant to Section X of this Order shall be made available to the Region, NYSDOH, or NYSDEC upon request. Respondent shall use its best efforts to insure that all employees of the Respondent and all persons, including contractors and subcontractors who engage in activities under this Order, are made available to, and cooperate with the Region, NYSDOH and NYSDEC, if written or oral information is sought.
2. All information, data, or records submitted to the Region by the Respondent pursuant to this Order will be available to the public to the extent permitted by the Freedom of Information Act, 5 U.S.C. §§ 552 et seq. Respondent may assert a business or other similar, applicable confidentiality claim covering all or part of any information submitted to the Region. Any assertion of confidentiality shall be accompanied by sufficient documentation to justify the requirements of 40 C.F.R. § 2.204(e)(4). Information determined to be confidential by the Region shall be disclosed only to the extent permitted by 40 C.F.R. Part 2.
3. Notwithstanding the foregoing, Respondent agrees not to assert any confidentiality claim with regard to any analytical data developed pursuant to this Order, or with regard to any portion of a technical report in which such data appears or is referred to.

XV. RESERVATION OF RIGHTS

1. The Region expressly reserves, without limitation, all of its statutory and regulatory powers, authorities, rights, remedies and defenses, both legal and equitable, including the right to seek injunctive relief, cost recovery, monetary penalties, or punitive damages.
2. This Order shall not be construed as a covenant not to sue, or as a release, waiver or limitation of any rights, remedies, defenses, powers and or authorities which the Region has under the Act, the Comprehensive Environmental Response Compensation and Liability Act, as amended, 42 U.S.C. § 9601 et seq ("CERCLA"), or any other statutory, regulatory or common law authority.
3. This Order shall not limit or otherwise preclude the Region from taking any additional legal action against the Respondent should the Region determine that any such additional legal action is necessary or warranted.
4. The Region reserves the right to perform any portion of the work required by this Order including, but not limited to, any additional site characterization, feasibility study, interim measure, and/or response

or corrective action deemed necessary to protect human health or the environment. The Region may exercise its authority under CERCLA to undertake removal or remedial actions at any time.

5. Notwithstanding compliance with the terms of this Order, Respondent is not released from liability for the costs of any response actions taken by the Region. The Region reserves the right to seek reimbursement from Respondent for any costs incurred by the United States.

6. If Respondent fails to comply with any terms or any provisions of this Order, the Region reserves the right, in lieu of assessing a stipulated penalty through this Order, to commence an independent action to seek a civil penalty not to exceed the statutory maximum then current for each day of noncompliance.

7. Nothing in this Order shall constitute, or be construed to constitute, a release from any claim, cause of action or demand in law or equity brought by the Region against any person, firm, partnership, or corporation for any liability it may have arising out of, or relating in any way to, the generation, storage, treatment, handling, transportation, release, or disposal of any solid waste, hazardous constituent, hazardous substance, hazardous waste, pollutant, or contaminant found at, taken to, taken from, or emanating from the relevant Shafts.

8. This Order, and any stipulated penalties which may be imposed in connection with or arising from any breach of this Order, shall not bar, estop, or otherwise prevent the Region or any other federal, state agency or department, from taking any other action against or affecting the Respondent or any subdivision thereof, including NYCDEP.

9. This Order shall not be construed as a finding or determination that the general operation of the relevant Shafts, the continued presence of the Operators, actuators and other equipment in the relevant Shafts which contain or are contaminated with PCBs, mercury, lead and other contaminants complies with or violates RCRA, TSCA, the Clean Water act, or any other statute or regulation. Further, this Order shall not be construed as a finding or determination that the general operation of the relevant Shafts, any discharge of PCBs, mercury, lead and other contaminants complies with or violates RCRA, TSCA, the Clean Water act, or any other statute or regulation.

XVI. ON-SITE AND OFF-SITE ACCESS

1. Until this Order is terminated pursuant to Section XXII of this Order, Respondent shall permit the Region, and, if the Region deems it necessary, NYSDOH and NYSDEC representatives, authorized designees, employees, agents, contractors, subcontractors, or consultants to enter and freely move about the relevant Shafts, in accordance with any operational requirements and any health and safety plans that are in place at said Shafts and that are determined by the Region to be reasonable, for, at a minimum, the following purposes:

- a. Observing activities at the relevant Shafts, interviewing NYCDEP personnel, contractors (including subcontractors and independent contractors), or any other entity or individual responsible for implementing any aspect or portion of this Order; and inspecting records relating to the relevant Shafts and this Order;
 - b. Conducting sampling, monitoring, or any other such activity which the Region or the PC deems necessary; using a camera, sound recording, video or any other documentary type of equipment;
 - c. Verifying the information, reports and data submitted to the Region by the Respondent and/or,
 - d. Gathering other information as authorized by statute.
2. To the extent that work required by this Order must be performed on property not owned or controlled by the Respondent, the Respondent shall use its best efforts to obtain a "Site Access Agreement" to perform such work within thirty (30) days of the date Respondent becomes aware or should be aware of a need to perform such work. Any such Access Agreement shall provide for reasonable access by the Region, NYSDOH and NYSDEC. In the event that a Site Access Agreement is not obtained within the thirty-day period, the Respondent shall notify the Region, in writing, documenting its best efforts to obtain such agreements. Best efforts shall include, at a minimum:
- a. A certified letter from the Respondent to the present owner of such property requesting permission to allow the Respondent, the Region, NYSDOH, NYSDEC and any of their authorized representatives access to such property; and
 - b. The property owner's response, if any.
4. Nothing in this section shall be construed to limit or otherwise affect the Respondent's liability and obligation to perform corrective action, including corrective action outside of the relevant Shafts, notwithstanding the lack of access. The Region may determine that additional on-site measures must be taken to address releases outside of the relevant Shafts if access to off-site areas cannot be obtained.
5. Nothing in this Order shall be construed to limit or otherwise affect the Region's right of access and entry pursuant to any applicable laws and regulations, including the Act and CERCLA.

XVII. INDEMNIFICATION OF THE UNITED STATES GOVERNMENT

Respondent shall indemnify, save and hold harmless the United States Government, its agencies, departments, agents, and/or employees, from any and all claims or causes of action arising from or on account of acts or omissions of Respondent or its agents, independent contractors, receivers, trustees, subcontractors or successors and/or assigns in carrying out activities required by this Order. This

indemnification shall not be construed as in any way affecting or limiting the rights or obligations of the Respondent or the United States under their various contracts or statutes.

XVIII. OTHER APPLICABLE LAWS

No provision of this Order, nor compliance with this Order, shall be deemed to relieve Respondent of its obligation to comply with the requirements of all applicable local, state and federal laws and regulations. Respondent shall obtain all permits or approvals necessary to perform the work required by this Order.

XIX. SEVERABILITY

If any provision or authority of this Order or the application of this Order to any party or circumstance is found to be invalid, or is temporarily stayed, the remainder of this Order shall remain in force and shall not be affected thereby.

XX. STIPULATED PENALTIES

1. Unless the Respondent is excused under the "Force Majeure and Excusable Delay" provision of this Order (Section XXI), if the Respondent fails to comply with any requirement, term, or condition set forth in or required by this Order, it shall pay a stipulated penalty for each

incident of noncompliance as follows:

			Stipulated Penalty	For Each Day of	Non-Compliance
	Order Sections	Deliverable	1st through 10th day	11th through 20th day	21st day and beyond
1	V. 4, 6, 9, 10 and 13.a	Maintenance and continuation of ongoing plans, programs, or monitoring.	\$2,000	\$5,500	\$5,500
2	V. 12, 13.b, c & d, 14a and 15b	Compliance with required milestones, including those in Appendix C, and excluding the following: compliance with a revised inspection schedule approved by the Region pursuant to Section V.12; and compliance with any schedule submitted by the Special Technical Working Group pursuant to Section V.13.c, and approved by the Region, which milestones are covered in row 5 below.	\$2,000	\$5,500	\$5,500
3	V. 5- 8, 10, 11.b, 14.b, 15a, & 16	Submission of Plans, Schedules, Risk Assessments, Evaluations, Modified SOPs, and other documents required to be submitted to the Region.	\$1,000	\$2,000	\$5,500
4	V. 5- 8, 10, 11.b, 14.b, 15a, & 16, & VI. 2	Submission of revised documents.	\$1,000	\$2,000	\$5,500
5	V. 5- 8, 10, 11.(c), 12, 13.c, 14.b, 15a, & 16, & VI. 3 & 4, & XIII.1	Compliance with milestones for the implementation of plans, and compliance with all milestones in approved Plans, Schedules, Risk Assessments, Evaluations, Modified SOPs requiring Regional approval, and other documents.	\$1,000	\$2,000	\$5,500
6	V. 9	Notice to the Region	\$2,000	\$5,500	\$5,500
7	XIII. 1	Notice to the Region	\$1,000	\$2,000	\$5,500
8	V. 17	Submission of Quarterly Progress Report.	\$500	\$1,000	\$2,000

			Stipulated Penalty	For Each Day of	Non-Compliance
9	V. - XVI.	Compliance with all other performance dates or times specified in this Order.	\$1,000	\$2,000	\$5,500

2. All penalties shall begin to accrue, as determined by the Region, on the date that complete performance is due or a violation occurs, and shall continue to accrue through the final day of noncompliance or complete correction of the noncompliance, whichever is later.

3. The stipulated penalties set forth above shall not in any way alter or relieve the Respondent from any obligation or responsibility imposed by or under the terms of this Order. Moreover, nothing in this Section shall be construed as prohibiting, altering, or in any way limiting the Region's ability to seek or impose any other remedy, sanction, or penalty.

4. No payments made under this Section shall be claimed or used as a tax deduction by the Respondent.

5. In any action concerning the stipulated penalties provided for in this Section, the Respondent shall have the burden of proving that it was at all times strictly complying with the terms and conditions of this Order.

6. The Region shall make all demands for stipulated penalties in writing either by certified mail, return receipt requested, or by facsimile transmission, to the person designated by Respondent pursuant to Section XII. 2 above as the recipient of all written communications and notices required by this Order. Unless Respondent makes a submittal pursuant to subsection 8 below, stipulated penalties shall be paid within forty-five (45) days of receipt of said written demand, and shall become due and payable monthly thereafter for as long as they continue to accrue, as provided in subsection 2 above. Interest shall also accrue on any amount owed at the rate established by the Secretary of the Treasury pursuant to 31 U.S.C. §3717. Stipulated penalties shall be paid by cashier's or certified check made payable to "Treasurer of the United States" and shall be mailed to Regional Hearing Clerk, U.S. Environmental Protection Agency, P.O. Box 360188M, Pittsburgh, Pennsylvania 15251, unless another entity or official is designated by the Region. The check shall reference the complete name and address of the Respondent, the name of this Order, and its docket number. A copy of the check and letter forwarding the check shall also be submitted to the PC.

7. Except for stipulated penalties resulting from Respondent's failure to comply with milestones

V.14(a)(1)iii, (2)iii, (3)iii and V.15(b)7, stipulated penalties incurred by Respondent for failure to timely achieve any other milestone in section V.14(a) or V.15(b) shall be forgiven upon the Respondent curing its default on or before the date for performance of the next milestone to be performed by it in section V.14(a) or V.15(b), and upon Respondent's timely compliance with this next milestone.

8. After receipt of a demand for stipulated penalties, Respondent may within ten (10) days of receipt of such demand, provide the Region with a written explanation of why it believes the stipulated penalties are not appropriate for the act(s) of noncompliance cited by the Region.

9. The Director may, in his sole discretion, reduce or eliminate such stipulated penalties based on Respondent's written explanation as specified in subsection 8, immediately above. If the Director does not eliminate the stipulated penalties, then the Region will again notify Respondent in writing that the original or reduced stipulated penalties must be paid by Respondent. Respondent shall pay the stipulated penalties as set forth in the Region's notice issued pursuant to this subsection within thirty (30) days of its receipt of the notice, and further stipulated penalties shall become due and payable monthly thereafter for as long as they continue to accrue, as provided in subsection 2 above. The foregoing notice may be transmitted to the Respondent by the means provided for transmittal of the original demand for stipulated penalties as provided in subsection 6 above.

XXI. FORCE MAJEURE AND EXCUSABLE DELAY

1. Respondent shall perform all the requirements of this Order within the time limits set forth, approved, or established herein, unless the performance is prevented or delayed solely by circumstances which constitute a force majeure event. A force majeure event is defined as any event arising from causes not reasonably foreseeable and beyond the control of the Respondent which could not be overcome by due diligence and which delays or prevents performance by a date required by this Order. Such events do not include unanticipated or increased costs of performance, changed economic circumstances, or normal precipitation events. The failure of a local, state or federal regulatory agency to timely issue any necessary permit or approval to Respondent is a force majeure event where, in accordance with all applicable laws and regulations, the Respondent timely submitted an application, did all it could do to ensure that such application was complete, provided all necessary supporting information, and continued to pursue such permit application in good faith and with due diligence subsequent to its original submission. The Region's inability to provide Respondent with its written approval, disapproval, comments and/or modifications within the time set forth in the first sentence of Section VI.2 above shall also be deemed a force majeure event, provided that the subject document submitted by Respondent for the Region's consideration was submitted within the time required by this Order and that Respondent did all it could to ensure that the document was complete and provided all necessary supporting information, and further provided that Respondent demonstrates that the Region's delay was the cause of Respondent's inability to timely comply with any milestone required by this Order.

2. The Respondent shall notify the PC in writing within ten (10) days after it becomes aware of any event, which it knows or should know, constitutes a force majeure event. Such notice shall detail the estimated length of delay, including necessary demobilization and remobilization, its causes, measures taken or to be taken to minimize the delay, and an estimated timetable for implementation of these measures. Respondent must adopt all reasonable measures to avoid and minimize the delay. Failure to comply with the notice provision of this section shall constitute a waiver of Respondent's right to assert a claim of force majeure and shall be grounds for the Region to deny Respondent an extension of time for performance.
3. After receiving such notice from Respondent that Respondent is invoking the force majeure provisions of this Order, the Region will respond in writing indicating either the Region's agreement that the event constitutes a force majeure event or its disagreement and the reasons therefore.
4. If the parties agree that a force majeure event has occurred, the time for performance may be extended, upon the Region's approval, for a period equal to the length of time performance is delayed as a result of such circumstances. This shall be accomplished through written modification to the affected schedule or schedules in accordance with Section XXI.2 below. Such an extension does not alter the schedule for performance or completion of any other tasks required by this Order unless these are also specifically altered by the relevant modification.
5. In the event the parties cannot agree that any delay or failure has been or will be caused by a force majeure event, or if there is no agreement on the length of the extension, the dispute will be resolved in accordance with the Dispute Resolution provisions of this Order (Section XXV).

XXII. ENFORCEMENT

1. The failure of Respondent to comply with any provision of this Order may be considered a violation of this Order. Such violation may give rise to an enforcement action pursuant to Section 7003(b) of the Act, 42 U.S.C. § 6973(b), pursuant to which Respondent shall not be subject to civil penalties exceeding the statutory maximum then current for each day such violation occurs or such failure to comply continues.
2. Nothing herein shall preclude the Region from taking any additional enforcement actions against Respondent or a third party, and/or such other actions as it may deem necessary for the abatement or prevention of a threat to public health or the environment arising from conditions at the relevant Shafts. Nor shall the Region be precluded from taking any such other enforcement actions against Respondent or a third party as the Region may deem necessary based on additional information about conditions at the relevant Shafts, or under other environmental laws.

XXIII. NO FINAL AGENCY ACTION

1. Notwithstanding any other provision of this Order, no action or decision by the Region pursuant to this Order, including without limitation, decisions of the Regional Administrator, the Director, or any authorized representative of the Region, shall constitute final agency action giving rise to any rights of judicial review prior to the Region's initiation of a judicial action for a violation of this Order, which may include an action for penalties or an action to compel Respondent's compliance with the terms and conditions of this Order, and/or a request for other relief.
2. Where Respondent fails or refuses to abide by a final approval or decision, or other determination issued by the Region pursuant to sections VI.2 or XXV.1 herein, and the Region commences an action related to such failure or refusal, Respondent, in such action, shall bear the burden of proving that the Region's approval, decision, or other determination was arbitrary and capricious, or not in accordance with the law or this Order.

XXIV. MODIFICATION

1. This Order may be modified by Respondent and the Region. Such amendments shall be in writing, shall first be signed by Respondent, and shall have as their effective date the date on which they are signed by the Regional Administrator of the Region.
2. Notwithstanding the above, the Director and the Respondent may agree to changes in the scheduling of performance dates. Any such change must be requested in writing by the Respondent and be approved in writing by the Director. The Respondent's written request and the Region's written approval of a modified schedule shall be incorporated herein by reference and any schedule thereby modified shall be deemed to be a binding, enforceable portion of this Order.
3. No informal advice, guidance, suggestions, or comments by the Region regarding reports, plans, specifications, schedules, and any other writing submitted by the Respondent will be construed as an amendment or modification to this Order.

XXV. DISPUTE RESOLUTION

1. Both parties shall use their best efforts to informally and in good faith resolve all disputes and differences of opinion. Notwithstanding the above, if Respondent disagrees, in whole or in part, with any disapproval or modification or other decision or directive made by the Region pursuant to this Order, Respondent shall notify the Region of its objections and the basis (bases) therefore within thirty (30) days of receipt of the Region's disapproval, modification, decision, or directive. Said notice shall set forth the specific points of the dispute, the position Respondent is maintaining, the basis (bases) for Respondent's position, and any matters Respondent considers necessary for the Region's determination. Within thirty (30) days of the Region's receipt of such written notice, or by such other deadline agreed to by the parties, the Region will provide to Respondent its decision on the pending dispute, which decision shall be binding on both parties to this Order.

2. The existence of a dispute as defined herein, and the Region's consideration of matters placed into dispute shall excuse, toll, or suspend during the pendency of the dispute resolution process the compliance obligation or deadline which is in dispute and any other obligation or deadline which is demonstrably dependent on the matters in dispute, and the Region shall not seek to assess a penalty for noncompliance with the obligation or deadline for the period of time during which the obligation or deadline was excused, tolled, or suspended, regardless of the decision on the dispute. No obligation or deadline shall be excused, tolled, or suspended, unless Respondent exercises due diligence to resolve the dispute.

XVI. EFFECTIVE DATE

The effective date of this Order shall be the date on which it is executed by the Regional Administrator of the Region.

XXVII. TERMINATION

This Order and all of its terms and provisions shall remain in effect until all of the activities called for by the Order are completed and Respondent is so notified in writing by the Region. The Respondent shall certify to the Region in writing its completion of all activities required by the Order. The Region's notice terminating the Order shall be signed by the Regional Administrator.

XXVIII. CONSENT

1. Respondent consents to and agrees not to contest the Region's jurisdiction to issue this Order. In addition, whether brought in an administrative or judicial proceeding, the Respondent consents to and agrees not to contest the Region's jurisdiction to enforce or compel compliance with any term of this Order.
2. The Respondent consents to the issuance of this Order and its terms, and agrees to undertake all actions required by the terms and conditions of this Order, including any portions of the Order incorporated by reference. Respondent consents to the issuance of this Order, as an Order, pursuant to Section 7003 of the Act, 42 U.S.C. § 6973, and explicitly waives any right it may have to request a hearing on this matter. Finally, the Respondent agrees not to contest, and waives any defense concerning the validity of this Order, or any particular provision contained herein.
3. The execution of this Order on consent is not intended nor should it be construed as an admission relating to the violation of any law, rule or regulation or an assumption of any liability or financial responsibility beyond that expressly stated herein. Respondent neither admits nor denies the Findings of Fact and Conclusions of Law stated in Section III of this Order on Consent.
4. The signatory to this Order for Respondent certifies that he or she is fully authorized to enter into the terms and conditions of this Order.

XXIX. PUBLIC PARTICIPATION

This Order shall be subject to public comment pursuant to Section 7003 of the Act, 42 U.S.C. § 6973. The comment period will last for thirty days during which time a public meeting will be held by the Region. The Region will consider all comments received. If these comments disclose facts or considerations which indicate that the terms of the Order are inappropriate, improper, or

inadequate, the Region will seek Respondent's consent to modify this Order accordingly, prior to its issuance.

The City of New York

Joel A. Miele, Sr., P.E.
Commissioner, New York City Department of Environmental Protection

Date: _____

It is so Ordered:

Jeanne Fox, Regional Administrator,
U.S. Environmental Protection Agency, Region II
290 Broadway
New York, New York 10007-1866

Date: _____